10: d'Orleans--320-321 T-3 (1891-92) 1894 Laos
116, 411, 438, 443, 778

"They [LSS: women merchants in Luang Prabang] have a very diversified stock of goods to choose from, including gold embroidered shirts made by the Lus, Siam brocaded vests, old silver, bracelets made of Kas bronze, and hatchets and other weapons in old bronze; these latter are very scarce and difficult to buy, as they are preserved with superstitious reverence by the families to which they belong. The hatchets, some of which are straight while others are curved, are very characteristic, while the ivory-handled knives represent yaks, the genii of the Buddhist religion, [321] similar to those which are found in the interior of Borneo."

10: d'Orleans--321 T-3 (1891-92) 1894 Laos
116, 438, 777, 831, 842

[LSS: in the market of Luang Prabang] "There are amulets, wild boar tusks, pyrites, and fossils rolled up in thin silver thread, some of these latter being supposed to possess the power of fecundation, while others are obscene."

10: d'Orleans--321 [2] T-3 (1891-92) 1894 Laos
116, 328, 438

"The industries special to the country are represented by silver work, cups for the temples, tobacco jars, apparatus for crushing the betel nut, and knife handles. These articles are made of gold for personages of very high standing, but only to order."

10: d'Orleans--339 [2] T-3 (1891-92) 1894 Laos
116, 274, 438, 491

"Going up the stream as far as the point where the two rivers meet, we came to the movable bridge built upon piles, which leads to the village of Pan Luong and beyond that, quite at the south of the village, the manufactory of tchoum-tchoum. This liquor is obtained by putting water and rice into earthenware jars, and letting it ferment for a fortnight; at the end of that time the contents of the jars are placed, together with a little yeast, into wooden casks surmounted by a large vat full of water. By a somewhat complicated process, the liquor known as tchoum-tchoum is obtained and sold at the rate of two ticals per gallon."

10: d'Orleans--368 T-3 (1891-92) 1894 Laos
116, 241, 262, 438

"... The village of Muong Liep (Diap on the map), once important, now possesses only a few houses. The gardens are full of fruit trees, cocoa trees, areca nut trees, oranges, bananas, and the mak tan la late, (1) which are eaten with a spoon.

1. In French, cœur-de-bœuf.

We cannot buy any rice, the inhabitants having very little. They got it from Nam Ou, or certain villages especially given to its growth."

000 If death had not placed a brutal term on his wanderings a few weeks later, the serious Mouhot might also have been the first man to question the impassive Buddhas on the mysterious past of this remote land, felt the infinite charm of its melodious nights when the khenes give voice to their moving chords, and -- who can say? -- sung the grace of the pretty girls with bare and gilded breasts who in their carefree way weave multicolored scarves under their flowered huts.

105 He contents himself with noting rapidly: "Fortunately this is not like Siam, and I can get help from the natives. . . . The /225/ Laotians are peaceable, submissive, patient, sober, trusting, credulous, superstitious, faithful, simple and naive. They naturally /685/ hold robbery in horror. The story is told that one of their kings had thieves fried in a cauldron of boiling oil, but since the ravages of the last wars a certain number of thieves are beginning to be found among them who have been driven to rapine by poverty or by the spirit of vengeance.

/685/ "Besides cultivating rice and maize the Laotians grow batatas, /241/ gourds, red peppers, melons and other vegetables. . . . They sell /438 the Chinese ivory and pelts from tigers and wild animals. They 434/ also trade gold dust, silver and copper ore, gamboge, cardamom, lac, wax, dyeing wood, cotton, silk and all the products of their soil for heavy porcelain, small glassware and other small commodities of Chinese industry.

"The Laotians are not made for war. Ever since the beginning they have been subjected to the neighboring kings, and have never been able to shake off this heavy yoke.

"They seem to be more industrious than the Siamese and to /101/ possess more of the spirit of adventure and trade. Although both peoples /226/ have many points of resemblance, both physical and moral, the Laotians can nevertheless be distinguished by their dialect and especially by their customs, which are simpler and more amiable.

533 ". . . Their music is very sweet, harmonious and sentimental.
101 Only three people are needed to make a melodious concert. One plays a bamboo organ, the second signs romances with the accent of a man inspired, and the third strikes strips of a sonorous wood together in rhythm, the clicking sounds of which have a striking effect" (1).

1. This praise of Laotian music should be compared with the

133 The market of Bassac owes its importance to the proximity of the plateau. It is therefore a storehouse for the Laotians of the whole 433 region, a reservoir [51] from which they draw. The part which it •438 plays is obviously a fine one, and no more can be asked of it.

There has also been much discussion as to whether large-scale breeding of buffalo and oxen would be successful there, for at present livestock is found only in the villages situated near the Sédone, that is to say, quite far from the plateau. The question has not yet been settled, and sufficient tests have not yet been made.

133 At the southernmost corner of the plateau there is a conical mountain about 800 meters in altitude which Francis Garnier baptized The Breast [le Téton] because of its shape, and to which he later gave the name Lagrée's Peak [Pic de Lagrée] in commemoration of the President of the Exploratory Commission of 1866.

[224] The elephant hunters of southern Laos go to the mountainous region of Saravane and Attopeu every year, and there they capture an annual quota of fifty to a hundred elephants.

133 To the east of Attopeu the mountains are inhabited by well-nigh independent Kha tribes--Cédangs, Djarais, Rognaos and [177 Bahnars. The two latter tribes have almost been pacified, thanks 797] to the persevering efforts of the Christian missionaries of Kon-Toum. This point is the center of the mission, and through it passes the road from Attopeu to Qui-Nhon. It crosses the Annamitic Chain 563 between Kon-Xalam and Kon-Tiorak at an altitude of about 900 meters. Near Attopeu this same road goes up over Pou-Satièng (400 meters), the last ramification of the great chain, which separates the basin of the Sé-Souk from that of the Sé-Kémane.

[135] This region of Pou-Satièng, Sé-Souk and Sé-Kémane has long been known to be rich in gold deposits.

§ IV--HYDROLOGY

a.--THE MÉKONG--GENERALITIES

133 It has often been said, and rightly so, that the Nile constituted Egypt. In the same way it can be said that the Mékong makes Laos, for is it not the river which gives what vitality there is to these vast isolated regions? Is it not the river which, by its annual floods, helps the growth of rice? Does it not supply, with its fish, a large

503 predict. It has therefore been decided that, for the moment at least, no more attention should be given to these rapids and that our concern should be restricted to accomplishing the labors necessary to facilitate steam navigation during the low water period in the following reaches:

"1. from Kratié to Stung-Treng and Khône;

"2. between Khône and Pak-Moun;

"3. between Savannakhèt and Sam-Pan-Na."

It might perhaps be understandable that the plan to make these rapids navigable should have been abandoned, if haste were made to build a railway joining the middle Mékong to some port in Annam, when the rapids would become an absolute barrier which we should no longer think of overcoming. But such is not the case, and many long years will still have to pass before the products of the markets of Luang-Prabang and Nong-Khay can reach the Annam coast in any practical way. Moreover, if the work on the navigability of the Mékong continues to go forward at the same slow rate and if we do not take greater advantage of this "moving highway," we shall continue to play into the hands of the Siamese and the market in Bangkok, thanks to the Korat railway, will continue to absorb the Laotian products which should have no other outlets than Saigon, Tourane and Vinh.

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d.--DESCRIPTION OF THE DIFFERENT REACHES

1. The Upper Reach

133 505 The Mékong enters Laos where it is joined by the Nam-La, at 21° 40' N. latitude, slightly downstream from Xieng-Hong which is on the 22nd parallel. As far as Xieng-Sèn it flows in an approximately northeast and southwest direction between two ranges of peaks which constrict its bed and make it a torrent rather than a river. In this narrow corridor it has dug a channel which varies, during the high water period, from 150 to 300 meters in width and which sometimes grows as narrow as 50 meters during the low water period. Its bed is generally encumbered with shoals and [79] rocks, and the whirlpools, eddies, currents and counter-currents make navigation impossible. Thus Lieutenant Commander Mazeran's bold and successful venture deserves mention here, for he succeeded in taking the gunboat La Grandière as far as Xieng-Kok, that is to say nearly to the 21st

3. The Inner Reach

505 133 361 438

After being joined by the Moun, the largest tributary on its right bank, the Mékong turns back eastward. As it leaves the narrow gorge of Pak-Moun where its course narrows to as little as 200 meters in width between sheer cliffs, it resumes a general north-northwest and south-southeast direction and spreads out over rich plains as far as the mouth of the Sédone.

Korat (1), the largest market in Siamese Laos, also belongs to the

(1) The Moun passes about 25 kilometers to the southeast of Korat.

Mékong basin through the Ta-Krong. The importance of this center is well-known, and today it is directly connected with Bangkok by a railway. Oubône (2), the other market town which is the storehouse

(2) Korat and Oubône are the seats of two French consulates.

of Lower Laos for Korat and Bangkok, as Nong-Khay is the storehouse of Upper Laos, is situated on the banks of the Moun about 300 kilometers from Korat, and only sixty from the Mékong. Communication between Korat and Oubône is achieved mainly by land, by means of ox-carts. We have seen in the foregoing that [93] steam navigation had been attempted on the Moun during the high water period as early as 1891, and that the Siamese were then planning to send their steamships out on the Mékong in the hope of getting there ahead of us. The launches provide a highly irregular service between Oubône and Tha-Phan-Sang, which is about 25 kilometers downstream from Korat. The trip takes from eight to ten days going upriver, and four to five coming down.

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In its lower course, that is to say between Oubône and Pak-Moun, the Moun is barred near its mouth by shelves which make navigation extremely difficult, even for pirogues, during part of the year. The Chinese merchants of Oubône, however, who go by pirogue to Bassac or out on the Sédone, go up and down the Moun in all seasons. Because of the particular service for which they are used, their pirogues are known by the special name of Hua-Moun, or pirogues of the Moun (1)

(1) See table, Chapter VIII.

of the Moun (1).

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(1) See table, Chapter VIII.

The most difficult rapid to negotiate is the Keng-Tanah, situated only three kilometers from Pak-Moun. During the low water period it is necessary to unload them completely and transport them by hand across dry land over extremely rough sandstone rocks. It has been negotiated during the high water period by the single-wheeler the Haiphong, and since the current beyond the rapids is weak and the width sufficient (300 meters), steam navigation is possible as far as Oubône for perhaps two or three months.

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Francis Garnier describes this region as follows (2):

(2) Francis Garnier, op. cit. [Voyage d'exploration en Indo-Chine, 1885.]

"From Pi-Moun on the river is once more unobstructed. A very weak current, straight banks and a uniform width give it, in certain spots, the appearance of a canal dug by man."

At Pak-Sédone the Mékong is joined on its left bank by another important tributary, the Sédone. This river, which is about 200 kilometers in length, rounds the northern part of the plateau of the Bolovens. All the roads which descend from this mountain mass end in its valley, and all the products of the region leave it by way of the Sédone. Cardamom, which is the most important of these, is [94] an item much dealt in at the temporary market of Champi. The latter is the terminus of the convoys which come down from the plateau, and from this point on merchandise goes by river to Bassac or Oubône.

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The market of Champi had to be established fairly near the mouth of the Sédone, for just upriver and less than thirty kilometers from Pak-Sédone the river is barred by insurmountable waterfalls [Illustration here] fifteen meters in height. From the point of view of navigation the Sédone is therefore divided into two sections: the part situated above the falls and the part situated below.

505 133

To the north of the falls the Sédone has a reach some thirty kilometers in length which can be navigated in all seasons by pirogues

4. The Maritime Reach

505 133 Below Khône the Mékong is encumbered by islands, islets and shelves which are more or less difficult to negotiate. During the high water period the river covers most of these hazards. Only the crests of the trees are left above water, and one navigates in a veritable submerged forest which reminds one of an inundation.

361 438 Stung-Treng is an important center, especially by reason of its site, for the city is located at the junction of the Mékong and the Sé-Khong, somewhat below the point where the latter joins the Sésane, which is itself swelled near its mouth by the Ton-Lé-Srépok. The produce of the region of Attopeu naturally finds its way to Stung-Treng, for it is the commercial intermediary between this region and Cambodia.

505 133 At Thboung-Kla, thirty kilometers below Stung-Treng, the Mékong enters Cambodian territory. Then begins a long series of rapids which impede its course and make it difficult [99] [Illustration] [100] [Blank page] [101] to negotiate, but which do not constitute an insurmountable obstacle for steam launches which have sufficient speed. The first important post in Cambodia is at Kratié, and steamships can go up as far as this point in all seasons.

The Sékhong, the Sésane and the Srépok form a basin which is noteworthy for its extent, being equal in area to all of Cochinchina. Unfortunately, the population density and importance of trade in the basin are not in proportion to so considerable an area. The valleys are sparsely populated and traffic there is, in consequence, quite limited. Finally, these watercourses are difficult to negotiate.

The Sékhong is a river whose course stretches over about 400 kilometers. Its sources lie near the 16th parallel, some hundred kilometers to the southwest of Hué, in the orographic nucleus of the Annamitic Chain which also gives rise to one of its large tributaries, the Dak-Poyo.

The upper course of the Sékhong bears the name of Dak-Mout. This river crosses an extremely rough region where towering rocks hem in its torrential bed. Beyond Koum-Kang the valley of the Sékhong widens out and small pirogues can navigate there.

At Muong-Mat, that is to say somewhat below the 15th parallel, the Sékhong is joined by the Sé-Kémane, an important tributary which, under the name of the Dak-Poyo, has its origin in the same mountain mass as the Dak-Mout. After it, like the Sékhong, flows past steep

[114] of what has been observed, and because no better expression of the facts could be hoped for.

THE THAI RACE

142 144 "Laotians. Of all the Thais, the Laotian is the one who has remained the purest, although he has a much higher proportion of Aryan blood than the other varieties, with the exception of the Lus. Fairly tall in stature, his hair cut short, elegant in his movements and more refined than all the other inhabitants of the land, he is the aristocratic type of Laos. His upbringing, his education, his religion and even his vices have a mark of distinction which make 438 them stand out above those of his neighbors. An excellent boatman, and a trader rather than a farmer, he is the one who seems the master 505 of the land, as much by virtue of his commercial aptitudes as by the 484 ease with which he ranges the country. Mounted on his long and narrow shaped pirogue, made in one piece of a tree trunk hollowed out by fire, he goes great distances to visit peoples of the most varied races [175] [Illustration] [176] [Blank page] [177] and serves as a link between all the human varieties which populate Laos. He is at home and at his ease everywhere, standing out clearly above all his countrymen in this respect.

[361] "The Laotian prefers to settle along navigable watercourses and [241] in proximity to plains of ricefields. He is glad to have his land [567] worked by mercenaries or by dependents of inferior race, and sometimes by slaves (at least before our arrival). He himself, with quite an extensive knowledge of the needs and resources of the other inhabitants of the land, particularly likes to traffic in all kinds of merchandise. He it is who goes to buy forest products and cereal grains on the spot from the mountainfolk or from sedentary farmers, and sells them cloth, salt, tobacco, earthenware, farming implements [439] etc. in exchange. He it is who exports the products of Laos to neighboring countries and brings back the things which Laotian industry cannot produce. His business as a commercial traveler, which he likes and which gives him a good standard of living, occupies him for only a few months of the year but brings him into contact with all the neighboring peoples and also with the Europeans and Chinese in the Siamese, Annamite and Cochinchinese trading posts. Thence arises his veneer of civilization which strikes one at first glance.

149; Reinach--147 G-3 (no date) 1901 AM1 Indochina
Laotians AM8

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Polygamy. Although polygamy is not the rule in Laos, it is sanctioned by custom, and the only limits as to the number of wives one man may possess are the extent of his resources and his personal taste for becoming the husband of a greater or lesser number of wives.

Since infertile unions are regarded as a punishment of [194] heaven, and since physiological defects are beyond the comprehension of the Laotians, a husband who has no children has two courses between which he can choose:

[586]

1. To repudiate his sterile wife. He must then leave her all their property gains since their marriage and half of their common property;

2. To keep this wife and take a second one.

Recourse is preferably had to the last solution in most cases. By acting thus the husband avoids making restitutions which would often be difficult for him. Moreover, his first wife often persuades him to take a second wife who will be under her orders and almost become her slave.

This is what does happen if the husband has enough money for several wives. They are all under the domination of the first, never sit at the same rank as she and may not wear jewels or clothes which are as rich and sumptuous as hers. They are, in a way, legal concubines.

These secondary wives are ranked in accordance with their date of entry into the polygamous household and are designated as the first wife, second wife, third wife, fourth wife, etc. In the house, except for the times when the husband or master keeps them with him, they are employed as servants for all the household tasks, farming, spinning cotton, weaving cloth, etc.

In the case the first wife should die, and according to the will of the husband, the second wife takes her place and the others advance one notch.

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There is also another very curious type of polygamy which is encouraged by the nomadic habits of the Laotian traveler or trader and which, "utile dulci," yields him profit, security and pleasure. Some natives are, in fact, married at several different places, often quite far from one another and generally situated at the spots where periodic markets are held.

The advantages of this type of polygamy--from the Laotian point of view, of course--are that the husband can have an associate

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595 in each center who will represent him, handle business in his absence,
485 collect at leisure the stock of trading merchandise needed for the next [195] trip, and also provide a home for him where he is sure to find a smiling face and a warm welcome in the course of his wanderings.

554 Among the nobility and the so-called princely families polygamy
595 is the rule and is almost obligatory for the sake of prestige, which demands a greater or lesser number of concubines depending on the husband's rank. It may sometimes happen, for various reasons, that there are two wives whose progeniture enjoy a higher rank and inherit the titles and duties of the father. It also happens, in this social milieu, that the first wife or wives will see that their husband is growing old, worn out and morose, and will seek to distract him during his last years by making him marry quite young girls for whom he is more of a father than a husband but who give him the illusion of rejuvenation and bring joy and gaiety into the house with the light of their youth (1).

(1) Thanks to the docile character of Laotian women in general, and also to the atavistic imprint of custom which makes them regard polygamy as an entirely natural status, peace and harmony are rarely troubled in such households. A hierarchy naturally arises among the various wives and concubines. Each of them remains in the place assigned to her by the date of her entry into the household and enjoys any special favors which may be conferred on her by their common husband without arousing any jealousy.

Quarrels between wives are so rare that when one does by chance occur the corporal punishments decreed by ancient custom are unhesitatingly applied. The situation is of such a nature as to preserve among Laotian wives a spirit of conciliation and amiability which is not the least of their charms.

832 Kissing. Punishment for amatory offenses. Like most of the
834 peoples of the Far East, the Laotians do not indulge in kissing, at least not in the European manner. They rub their noses against the skin of their children or wives and sniff more or less noisily.

Although the morals of the Laotians seem excessively free to us and their remarks, songs and gestures often border on what we would describe as obscenity, we should not conclude that the Laotians are deliberately lewd or cynical. They are instinctively careful to be

291 the Deng-Thais, is applied to the edges of the gown. It is further
563 ornamented [233] on the outside edge opposite the buttonholes with colored silk embroidery which does not go down below the waist.

This garment is also folded in half lengthwise and worn rolled around the body with the sleeves left hanging.

302 The women wear their hair parted down the middle in front and rolled into a sort of long tassel behind which is contained within
301 the folds of a little turban. The latter is wound above the forehead and the free end inserted under the first turn, on the nape of the neck. This headdress is quite similar to that of the Annamite women in Tonkin.

In certain regions of Laos, Thai women wind their hair into a sort of coil which girls wear loosely down their neck and betrothed or married women wear on top of the head. Thai jewelry is made of heavy silver and is of the same type as Laotian jewelry. The men wear bracelets on their wrists.

262 Food. The Thai diet is like that of the Laotians, but they prefer
264 non-glutinous white rice and use chopsticks like the Chinese and Annamites.

276 The use of betel is quite widespread among the Thais, but in contrast to the Laotians they keep their teeth white. The Thais smoke the oily, opiated tobacco of Tonkin and China in bamboo waterpipes whose tiny bowls only contain a small pinch of tobacco. They also smoke a local variety of tobacco, either in cigarettes or in pipes with a highly worked clay bowl into which a long stem ending in a glass or jade mouthpiece is inserted.

156 Character. Although serious and reflective, the Thais have a vivacious and friendly character. They are somewhat cold in appearance, but are sound friends and highly affable when one gets to know them better.

[701] Gentler and more timid than the Laotians, they have no taste for the art of war and it is difficult to get them to stay in the native militia.

433 They are very self-seeking and much more miserly than the Lao-
• 438 tians. [234] It should be noted, moreover, that since they produce everything themselves and are a people of farmers and livestock
156 breeders, they do not have, by virtue of their ever sedentary occupations, the opportunities which these latter have to enjoy fairly high profits resulting from commercial transactions, nor the special habits which contact with different races gives.

181 The Thais love pleasure and celebrations. Guaranteed their daily
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Tribal Tai

619 The Neua-Thais. The Neua-Thais differ very little, in all
361 respects, from their fellows. They generally live on higher ground than the other Thais, but they change the location of their village quite frequently. [241] [Illustration] [242] [Blank page] [243]

291 The women knot their skirts under their armpits, above their breasts, and always wear a very short jacket made of cotton, silk or velvet, depending on the season.

231 They engage in sericulture, and with the silk spin and weave brocaded cloth with harmonious colors.

779 At the same time as ancestor worship, the Neu-Thais practice an attenuated form of Buddhism. Pagodas are rare and the bonzes, few in number, serve several centers in turn.

461 Their character is docile. They do not have a very marked taste
276 for trade and are content to be excellent farmers and livestock breeders. Unfortunately, they are inclined to be opium smokers. This is doubtless due to the proximity of the Meos and Yaos who are the producers of the drug.

619 The Phou-Eunes. This branch of the Thai family is very close to
101 the Laotians in mores and customs.

There are only a few modifications in costume and language, modifications due to the age-old proximity of the Annamites and the continuous relations which have existed between the two peoples. These latter may be explained by the fact that the territory long [438] inhabited by the Phou-Eunes in the east and southeast of Tran-Ninh is situated on the Tonkin Gulf side, and that their produce naturally flows towards the ports on the Annamite coast (1).

(1) To be sure, there are several groupings of Phou-Eunes in the Mekong basin, in Tran-Ninh, to the northeast of Vien-Tiane and in Camkeut-Cammon.

361 The Phou-Eunes prefer to live in high valleys and on high plateaus where the climate is quite severe during the winter. They are more reserved in character than the Laotians, more industrious and less inclined to celebrations and festivities of all kinds.

779 Their religion is Buddhism, but the bonzes are less numerous than elsewhere. It is probable that the little taste which Phou-Eunes have for the religious life is due to the influence of nearby Annam, where the bonzes are a long way from being venerated and coddled as they are in Laos.

Se-Bang-Fai. But studies are not yet sufficiently advanced for us to be able to give any useful information. 316

We have nevertheless felt that we should mention these deposits, in order to establish the importance of all this part of Laos from the point of view of mineral wealth.

[327] [Illustration at top of page]

CHAPTER VII

I

SCAVENGING

We have seen that the inhabitants of Laos are apathetic and little inclined to work. They nevertheless find, although they go to scarcely any trouble, enough to supply their needs easily. 461 241

Indeed, with the exception of a few annual crops such as tobacco, cotton and indigo which are grown on the ever-renewed alluvia of the watercourses, the production of rice and of maize are the only occupations which require--and even then during a relatively short time--any degree of work or perseverance. We may mention the opium poppy, ramie, hemp and the mulberry tree merely as a reminder, for only a small part of the population devotes its time to these crops, which are still not at all extensive. [249]

Yet, it may be objected, the native has an easy life, dresses adequately, [328] lives in a house which is solid and comfortable from his point of view, has various tools and utensils, weapons, and sometimes even valuable cloth goods, jewels, etc. He spends money for celebrations and for offerings to the bonzes and pagodas. He pays taxes, he supports court costs which are often large with respect to the question at issue, and he is subject to the exactions of his mandarins to a greater or less degree. Finally, the commercial transactions of Laos involve quantities and sums which are quite high in comparison to the sparse population. 511 438

How are we to reconcile all these factors, and how is it that the Laotian, who produces so little with his labor, nevertheless has all he needs to get along on?

This is due to the fact that Laos is above all else a scavenging country. 314

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Coccus lacca, which secretes the lac to envelop its larvae.

In trade it appears in the form of half-cylindrical fragments, in breakages (seed-lac), or else adhering to the branches of the tree on which it formed. The latter is lac on sticks, whence the English name stick-lac by which it is known in Far Eastern trading circles (2).

(2) Lac in its most widespread form--lac in shells (shellac)--is not found in Laos. It can easily be produced by boiling the preceding types in alkaline water.

This product is harvested by scavenging from trees which were seeded long ago and are scattered throughout the brush, and also by regular cultivation from a triennial tree, as will be seen below. The principal varieties of trees on which lac is found are the Ficus, the butées, the Croton, the Mimosa and the Acacia.

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There are three kinds of lac: bright-colored lac (which colors a moistened finger) in whole pieces, lac on wood and brown cellular lac in more or less broken fragments. Throughout the country, however, it is sold mixed, and only at the transit markets are the three kinds separated.

[435]

[330] The price per hundred kilograms is from 35 to 42 francs at Luang-Prabang, from 45 to 48 francs at Pak-Lay, from 47 to 50 francs at Nong-Khay, 42 francs at Khong and Bassac, 62 francs at Pnom-Penh and Cholen, and from 72 to 85 francs at Korat.

Crimson lake is used for dyeing as well as in the preparation of certain colors and varnishes with an alcohol base. A small proportion remains in the country, but the greater part is exported.

3. Cardamom (Mak-Neng).

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Cardamom is the fruit of the plant Hilateria cardamomum which grows in the forests but which may be cultivated, as is the case on the plateau of the Bolovens in Laos and in the region of Pursat in Cambodia. The variety common to all parts of Laos is the great cardamom or bastard cardamom, while that cultivated in Cambodia is the true cardamom or small cardamom, much superior to the first in quality and value.

The plant grows best in the humid forests, and is harvested in August or September. The plant has vast numbers of light seeds, and it takes about eighty or a hundred thousand seeds to make up the weight of one "mune" (about twelve kilograms). The price per

Its price varies between 12 and 15 francs per hundred kilograms.

6. Catechu (Sisiet).

Catechu is produced from a decoction of the bark of two varieties of trees, the catechu acacia and the leafy butée.

This product, which is used in making the national masticatory together with betel, betel nuts and lime, is consumed, in the large centers of Upper Laos, in the form of a dry residue obtained from a decoction of the bark. Generally, however, it is the bark itself which is consumed after it has been broken up into small pieces.

Natural sisiet takes the form of shreds of bark about a cubit (.45 meter) long by four centimeters wide and one centimeter thick. The shreds are tied together in packs of twenty-five or fifty, depending on the region.

The whole production is consumed locally. The natives [334] go into the forest at points where suitable trees are to be found, bundle up the pieces and load thm on great rafts which go down from Pak-Lay and Vien-Tiane to Bassac and even to Khong.

At Pak-Lay sisiet is worth only 7 francs and 50 centimes per hundred pieces, but it naturally costs more the further away one goes from the centers of production.

7. Curcuma (Khi-Mine).

This plant, of the Zingiberaceae family, has a rhizome which contains an orange-yellow coloring matter used for dyeing silk and cotton.

Sometimes the inhabitants (chiefly the women and children) rub their whole body with curcuma scrapings after a bath. The application of curcuma to the wet skin, which acquires a light yellow color, is said by the natives to ward off mosquitoes and keep the skin fresh.

Up to the present time this product has not formed the basis of any foreign trade. It is sold in small amounts on the markets of Laos.

8. Ginger.

The ginger which is called "Mak-Khing" in Laotian is the Zingiber officinale or gray ginger. Used as a condiment by the entire population, this product does not enter into trade. Its price varies between 12 francs and fifty centimes and 16 francs and fifty centimes per hundred kilograms.

9. Roucou.

The roucou, or fruit of the Roucouyer Bixia, is called "Kene-Mak-Soum-Phor" in Laotian. Literally, this means Seed of an acidulous mountain fruit. It is used to make red and orange dyes

824 314 386 when mixed with curcuma. The trees are found in the forest, and sometimes in gardens.

10. Yams.

262 241 The yam is an edible tubercle of the Dioscorea family. It is represented by two varieties, the white and the black, which are called "Mane-Phuek-Khao" and "Mane-Phuek-Dam" in Laotian. These tubercles are the main standby when there is a scarcity of rice and [335] maize, but in ordinary times they are used only to supplement the usual diet.

11. Taro or cush-cush (Mane-Pa).

Taro is also a food plant of the Aroïdées caladiées genus (Caladium esculentum). Like the yam, it is one of the most useful edible tubercles in times of famine.

12. Medicinal plants.

824 278 Designated by the generic name "Ya" in Laotian, these plants are represented by special types of orchids, roots, bark, berries, leaves and even pieces of wood of different kinds, the whole forming an assortment of medicaments.

[438] The Khas are the ones who collect these various products from the depths of the forests, and they trade them either to Chinese or to Laotians for money or other goods.

[435] Certain of these plants and barks are used by the Laotians while others, such as the leaves from orchid plants, for example, are purchased by Chinese merchants at prices which vary between 33 and 62 francs per hundred kilograms.

13. Cloves.

The clove tree (Caryophyllus aromaticus. Kane-Phou in Laotian) is quite scarce in Laos. Cloves are mixed with various ingredients in masticatories or are taken as medicine.

Cultivation of the clove tree ought to be developed in Laos because of the high value of its flowers which, when dried on the tree, constitute the cloves of commerce.

14. Beeswax (Phung).

222 [231] 314 [438] Beeswax is much sought-after in Laos, where a great deal of it is consumed. It is a scavenging product par excellence since, except in the Sib-Song-Pahn-Na, the inhabitants do not practice apiculture and are content to go into the forest and look for honeycombs in order to extract the wax. The latter is used for domestic needs and for worship ceremonies. It also forms the basis of quite an important trade.

Hunting

224 Hunting, for the inhabitants of Laos, is another form of scavenging, since it procures them either live animals or the remains of the same without any great labor or expense.

411 For the Laotian, time does not count. He makes his powder himself, and with the exception of firearms his hunting devices are also 224 of his own fabrication. With the help of this far from perfect equipment he is nevertheless able to capture live elephants and to procure the ivory and remains of those which he kills, as well as the hide, talons, bones and horns of a multitude of other animals. All these [438 262] products are so many trade commodities for him. The flesh of all these animals, moreover, makes a sizeable contribution to the diet of the Laotian hunter. It is a feast for him, for his family and for his entourage.

[325] [344] The natives have a perfect knowledge of the habits and customs of all the representatives of the local fauna. Patient, adroit, 224 endowed with excellent powers of hearing and sight which are further developed and sharpened by practice, they are not afraid to attack the tiger and other large animals despite their rudimentary weapons.

Lying hidden for hours at a time, motionless and silent and abstaining from smoking, the hunter waits for his victim without losing his self-control. When it approaches within a few meters of him, his sure eye and untrembling arm enable him to strike it dead with a bullet or with a poisoned arrow shot from a powerful crossbow.

One is astounded at the results achieved with weapons which are so imperfect, as much by their rudimentary construction as by their age, and which often lead one to fear more for the hunter's life than for the beast's. We must admire these men who, although reputed to be cowardly, brave danger with such primitive weapons and go in search of wild animals in their very lairs, killing them at almost point-blank range so that oftentimes the wad from the gun singes the animal's fur or the arrow goes in one side and out the other.

411 The firearms used by the Laotians are flintlock or muzzle-loading 439 rifles, some of which are of Siamese or Burmese manufacture. Others are imported from Europe through trade or in private cargoes. There are also old regulation rifles, British and others, chiefly those which bear the image of a cock and the word "Tower" stamped on the lock or breech.

224 this animal has been hunted to excess and because of [346] the value of ivory, it has disappeared from certain regions. It is scarcely ever found now except in the valleys of the Sesane, the Se-Ia-Drang and the Srepok and in the Muong of Maha-Say in Lower Laos, and in Vien-Tiane, Tran-Ninh, the Hua-Pahn, the Sib-Song-Chau-Thai, etc., in Upper Laos.

313 For the last ten years or so the working of the teak forests in the Siamese and Shan territories of the basin of the Upper Menam (1) has

224 438 (1) Elephants are used in Siam to carry teak logs from the place where they are felled to nearby watercourses.

necessitated the use of an ever-increasing number of these pachyderms, among which overwork and accidents claim many victims. Thus to fill the gaps elephants have to be sought where there are still some left, and it is precisely in French Laos, on the left bank of the Mekong, that a few wild herds are still found.

Since there is no shortage of buyers, it is to the interest of the hunters to capture as many of these valuable animals each year as possible and to train them with a view towards selling them. Since demand even greatly exceeds supply, an inflationary tendency has resulted which has caused prices to rise by sixty to eighty percent. Besides the sum paid to the sellers, the purchasers have to pay an exit duty amounting to half of the purchase price. This tax, like other similar ones of which we shall speak later on, is levied to compensate for the real estate tax which Laos does not yet have.

224 231 The methods now used to capture wild elephants are identical, except for minor details, in all parts of Laos. In order to summarize them and to provide a description of an elephant hunt, we shall have recourse to the interesting account which Captain Gosselin (2) has given.

(2) Le Laos et le Protectorat français, op. cit. [Paris, 1900.]

"At the beginning of the dry season, the owners of tame elephants make ready for the great beats which take place in the mountains near the Annam frontier. They train their elephants to run, so that they will develop speed, and manufacture immense ropes forty to fifty meters long, made from strands of buffalo hide [347] and rattan and strengthened with copper wire. A collar is fitted at one end of each rope which is large enough to be put around an elephant's neck, while a ring about sixty centimeters in diameter is fitted to the other end.

000 to a point where it is perfectly docile.

231 435 The sale price of elephants varies with their size, their sex, their age, and according to whether or not they have tusks and according to the quality and size of these latter. It also varies with the region.

At Outhai-Thani (Luang-Prabang) an elephant costs from 1,500 to 3,000 francs, and the cost is about the same at Vien-Tiane. In Lower Laos the price varies from 750 to 1,200 francs.

When an elephant dies it still leaves highly valuable remains, especially ivory.

237 438 435 1. Ivory.

A hundred kilograms of ivory sells for 1,800 francs at Outhai-Thani (Luang-Prabang), from 935 to 1,770 francs in Nong-Khay, from 750 to 1,250 francs in Song-Khone, from 750 to 1,670 francs in Saravane, from 1,000 to 1,670 francs in Bassac and from 1,500 to 1,670 francs in Khong, Stung-Treng and Attopeu. Its average cost in Cholen (Cochinchina) is 2,500 francs per hundred kilograms.

2. Bones.

The price of elephant bones is generally from 12 francs 50 centimes to 15 francs per hundred kilograms.

3. Hides.

Elephant hides cost from 60 to 70 francs per hundred kilograms.

The remains of other elephants furnish the markets of Laos with the following products: rhinoceros horns and hides, horns and hides from buffalo and oxen, horns and hides from all the deer tribe, hides, talons and bones from the cat family, bear and otter pelts, scales from anteaters, tortoises and caymans, etc. To this list should be added snake venom, bear gall and soft hartshorn, which are regarded as specific remedies against certain diseases.

The prices of some of these products are as follows:

Rhinoceros horns	111 to 137 francs per kilogram
Rhinoceros hides	60 to 70 francs per 100 kilograms
Soft hartshorn	1,666 to 2,200 francs per 100 kilograms or 18 to 40 francs per pair
[349] Horns of stags, elk and bucks (hard)	25 to 75 francs per 100 kilograms
Hides of stags, elk, bucks, goats	37 to 83 " " " "
Wild buffalo horns	50 to 60 " " " "
Wild buffalo hides	46 to 50 " " " "
Ox horns	50 to 58 " " " "

Ox hides	58 to 65 francs per 100 kilograms
Bones of tigers and other cats	58 to 75 " " " "
Pelts of tigers, panthers and other large cats	3 francs to 12 francs and 50 centimes apiece
Anteater scales (without the skin)	50 to 72 francs per 100 kilograms
Anteater hides (with scales)	46 to 50 " " " "
Skins of various monkeys	83 to 88 " " " "
Tortoise shells	37 francs and 50 centimes per 100 kilograms.

Fishing, preserved fish

Laos, with its extensive hydrological network and its watercourses of all sizes, is a fishing land par excellence. We have already noted the chief varieties of fish which populate its rivers, and have seen that most of them are represented by large-sized specimens.

Since the produce of fishing makes a considerable contribution to the food supply of the inhabitants, it has been necessary to create devices and combine various means for capturing this prey.

The methods, primitive at first, have been increasingly perfected, and each one has been modified so that it is adapted to some particular feature either of the watercourses or of the fish.

The devices used today are wholly made by the inhabitants. They vary greatly in form and--the fact is worth noting--are much like those used in Europe. Indeed, the floating line is common, but in its most rudimentary form, with a thorn for a hook and then the ground-line and long-line. There are also nets in great abundance, and they are identical with the ones found among our fishermen. The most common ones are the seine, the cast-net, the square dipping-net, the shrimping-net, the hoop-net, the landing-net and the large trammel. All this equipment is supplemented with bottles, [350] single and double bow-nets and traps. The Laotians also build large barrages across watercourses and provide them with corridors leading to bow-nets or hoop-nets.

Hiding places in the form of fixed huts on the watercourses are used for spear fishing. A light in these huts attracts the fish and the native, who is armed with a hardwood fork, spears it as soon as it comes within range. [Illustration here]

248 There are three harvests each year. In the first the shoots are .9 meter high, in the second 1.4 meters and in the third 1.6 meters. They yield, respectively, for an area of 14 square meters, 18, 20 and 24 kilograms of fiber.

At harvest time the shrub is split and left to soak in water for three hours, for the fiber is difficult to tear off. The work of decortication takes a long time, and this drawback has so far prevented the cultivation of this crop from spreading although it is an easy one on the whole and not at all exhausting for the soil, since it is possible to grow it twenty years in succession on the same plot of ground.

438 Exports from the provinces of southern Laos were more than fifty
248 tons in 1899. A great deal is used locally, since all the nets used for hunting and fishing are made with this fiber.

Prices are as follows (1):

248 (1) In view of the price at Bassac (37 francs), it would be ad-
435 vantageous to export this product to Cambodia, where it sells for twice as much.

	Per hundred kilograms
Plateau of the Bolovens	25 to 35 francs
Bassac	37 "
Saravane	60 "
Khong	60 to 80 "
Attopeu	30 "
Stung-Treng	54 to 62 "
Pnom-Penh	60 to 80 "

248 [367] HEMP. Hemp is grown in Upper Laos, but only for local consumption. It is used in making string, light rope, nets, etc. A very strong and fairly good-tasting alcohol is also extracted from its seeds. It is called "Pane" or "Nhia-Pane."

241 BATATAS. Various kinds of batatas which are more or less sweet
[262 are grown each year on the banks of the watercourses and in the still
23] moist sandy alluvia. These tubercles are chiefly consumed by the inhabitants, although small quantities are used to fatten certain animals, particularly pigs. The large variety of batata which is round and not very sweet is called "Mane-Phao" and the one which is elongated and sweeter is called "Mane-Keo."

249 segments, together with its envelope, while still green. The segments
276 are threaded in groups of sixteen on plant thongs and then gathered in packets of fifty or a hundred thongs. The packets are hung up at home near the hearth, and the smoke gives them a brownish color, dries out the nut completely and soon makes it insect-proof.

• 438 Since every Laotian, with only a few exceptions, has betel palms around his house, trade in betel nuts takes place only in the large mar-
276 kets, where there are packets of dried nuts which a few small merchants have collected. Within the country these packets are sold according to their number of nuts, and yet statistics give sale prices by weight, at figures varying between twenty and forty francs per hundred kilograms. It is probable that the latter figure applies to whole nuts, and the former to packets of nut segments.

249 BETEL. The betel leaf, which gives its name to the well-known masticatory, is a product of the Piper Betel which is grown everywhere in Laos and for which the trunks of betel palms generally serve as a support. It is to the cultivation of this plant that the Laotians devote the most attention. The soil is manured and weeded, the foot of the plant is surrounded by an earth mound, and the plant itself is protected against animals by a wooden enclosure. The betel palms around which the betel plants climb and twine profit from the care given the latter and generally produce a better harvest than trees which have been left alone. In order to water the betel plants, which often reach a height of seven or eight meters, the natives have devised a bamboo syringe, one end of which has a rounded nozzle pierced by small holes.

245 LAC. The tree on which the insects which secrete sticklac grow is called "Kok-Mak-Thoua-He." It is a biennial of the leguminous family and Acacia genus. Its fruit is a small edible bean, rounded and veined, which is contained [370]in groups of five or six in a soft, semi-parchmented pod. During its two years of life each shrub produces more than a million beans or seeds. A few of these are kept for seed, and the rest are consumed on the spot.

The cultivation of the shrub and of sticklac comprises two operations: seeding the "Kok-Mak-Thoua-He" and inducing colonies of coccus lacca to settle on its branches. The aphids of this insect produce the tinctorial matter called "Khang-Deng" or, literally, Red wax.

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Sugar cane. The production of sugar cane, which is still not very significant in Laos, deserves to be encouraged. Later on when this crop had been developed, the Laotians might be trained in the methods of the first stage of refinement. They would then be able to produce gray muscovado and sugar candy, which are easily exportable.

Southern Laos is the part of our possession which would lend itself [386] best to the extension of this crop. Although of secondary importance, it is nonetheless deserving of attention.

Benzoin trees. Increasing the number of trees which are producers of this precious resin is again a task for the administration. After a serious study of the conditions of growth of the plant in Laos, of its habitat and of the nature of the terrain best suited to it, it would be possible to set up seed gardens designed to supply young plants either to the natives or to Europeans who settled in the country and were interested in this crop. It yields a rich product, which brings a high price on the market. Benzoin is, in fact, widely used in perfumes and in the manufacture of varnishes.

Lac trees. All who are acquainted with Laos are unanimous in agreeing that increasing the production of sticklac is one of the main factors in increasing the country's wealth. What, indeed, could be more simple, thanks to the easy and rapid multiplication of the "Kok-Toua-He," the tree which grows almost without care and lends itself so well to the establishment of colonies of coccus lacca, the producers of a superior quality of gum lac?

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Cardamom. It would seem that experiments with growing true cardamom, as it is grown in Cambodia in the province of Pursat, might be attempted in Laos. The natives would have everything to gain from giving up the cultivation of wild cardamom for that of true cardamom, since the latter brings from five to ten times more than the former on the market of Pnom-Penh.

Until such time as this precious seed is introduced into Laos, it will be well to extend and encourage the cultivation of the present variety of cardamom. All those who have engaged in the production and commerce of this seed (1)--the mountainfolk who grow it, the

(1) It is much sought-after by the Chinese, who use it as a condiment as well as in pharmaceutical preparations.

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Chinese and Laotian middlemen and even the few European merchants--have found that it brings in rewarding profits. Indeed, by exporting this product the latter are assured of an almost certain gain of 20 to 30 percent.

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[387] Ramie. There is also much to be gained from increasing the production of ramie or Chinese nettle. It is assured of an outlet in Cambodia, where it sells for as much as 80 francs per hundred kilograms.

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Cinnamon. The extension of the plantations and gardens of cinnamon trees already in existence in the province of Vien-Tiane deserves serious encouragement. The bark of these trees is a valuable product which is much sought-after in China and in Europe.

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Opium poppies. The Government of Indo-China, which is both the preparer and seller of chandoo or opium for smoking, is the party which would gain most from obtaining the raw drug on French territory. It is, indeed, still dependent on British India for this product, and can acquire it only on extremely disadvantageous terms.

Since much time must still pass, however, before the Meos and the Yaos give up their age-old methods, it would be essential for the intensive cultivation of the opium poppy to be undertaken by Europeans on behalf of the administration. This would be possible if there were a guaranteed labor supply in the form of Chinese coolies, who would be enlisted primarily for the greater part of the work, and of native specialists who would deal only with scarification of the capsules, harvesting the opium and the first stage of its preparation.

These delicate operations are the ones which the Meos and the Yaos like best, but they dislike plowing, fertilizing, weeding and irrigation, all of which tasks are indispensable for obtaining a high yield of capsules and consequently of the raw drug. It would therefore be best to entrust this heavy work to foreign coolies, and it is probable that after a certain time they too would be capable of extracting the opium. Impelled by their example, the natives would doubtless then be seen to break with their prejudices and devote themselves also to intensive cultivation so as to reap its full benefits.

The role of the administration would then be at an end, and it would gradually diminish its intervention as free cultivation of the poppies increased.

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Raw opium which is produced locally or which comes from [388] neighboring countries is worth 22 francs, 50 centimes to 32 francs, 25 centimes per kilogram, depending on quality, in northern Laos.

805 **Weights.** The initial basis of weight is the "Bak" or "Salung," which is subdivided into three "Fones" or "Fines" and into thirty "Lis."

1 Bak or Salung = 3 Fones or 30 Lis = 0.003753 kilogram
1 Fone or 10 Lis = 0.001251 "
1 Li = 0.0001251 "

The multiples of the "Bak" or "Salung" are:

		kilograms
The Tael	= 10 Baks (10 Salungs) or 30 Fones	= 0.03753
The Sang (or Cattie or Hoi)	= 33 Baks (33 Salungs) or 99 Fones	= 1.23849
The Mune (or 10 Hois)	= 330 Baks (330 Salungs) or 990 Fones	= 12.3849

The multiples of the "Mune" are:

			kilograms
The Sen	= 10 Munes	=	123.849
The Lane	= 10 Sens	= 100 Munes	= 1,238.49
The Kot	= 10 Lanes	= 100 Sens = 1,000 Munes	= 12,384.9
The Tu	= 10 Kots = 100 Lanes = 1,000 Sens	= 10,000 Munes	= 123,849.

438 [411] The picul (Hap in Laotian) weighs 61.924 kilograms in theory, but it is currently counted at 60 kilograms or else at 60.4 kilograms in trade between Europeans and Chinese.

The sub-multiples of the picul are:

The Mune	= 12.3849 kilograms	or 1/5 of a picul
The Sang (or Cattie or Hoi)	= 1.23849 "	or 1/50 " "
The Nane	= 0.619245 "	or 1/100 " "

The multiples of the picul are:

The Sen	= 2 piculs	or 10 Munes
The Lane	= 20 piculs	or 100 Munes
The Kot	= 200 piculs	or 1,000 Munes
The Tu	= 2,000 piculs	or 10,000 Munes
The Ha-Song-Khai	= 20,000 piculs	or 100,000 Munes

Measures of volume and weight for grain and liquids (1)

(1) These measurements are represented by gourds, halves of coconuts, bamboo tubes or carefully calibrated baskets.

436 Coins. The old Laotian silver and copper coins in the shape of a pirogue which used to be used in the principalities of Vien-Tiane and Luang-Prabang can no longer be found today and have become curiosities. As a result of the Siamese incursions, the coins of Siam and India (Tical and Rupee) replaced the native coins. Finally, since Laos has become a French possession, the only officially recognized coinage is the French piaster of commerce (1) and its subdivisions.

(1) As well as the Mexican piasters of Hong-Kong and Singapore and the Japanese yen.

However, the Siamese and Hindu coins continue to circulate alongside this official coinage, and are in fact indispensable for transactions by reason of their weight, which bears a direct relation to the system in force in the land (2).

(2) The scale of equivalence between weights and coins is based on the standard of the "Salung" or tenth part of the Hong-Kong "Tael," which weighs 37.53 grams. This Tael is recognized as official for weighing opium. One might nevertheless just as well take as a basis the tenth part of the Shanghai Tael, which weighs 38.88 grams. This would give the picul a theoretical weight of 62.222 kilograms instead of 61.924 kilograms.

Silver in Laos, whether in the form of coins, bars, ingots, pieces of jewelry, etc., is regarded as merchandise and is bought and sold by weight without taking into account the agio which causes fluctuations in the market price. This is due to the fact that the Laotians, since they do not yet have direct trade and banking relations with neighboring countries, have no remittances to make in the trade centers where the agio [415] [Illustration] [416] [Blank page] [417] is felt and are ignorant of its effects on the conventional value of specie.

438 But in the last few years the middlemen of Laotian trade circles--
439 the Chinese and Burmese--who are in direct relation with the centers where the agio prevails have been feeling its effects, and the latter have had repercussions on the great mass of Laotian producers through progressive increases in the price of imported merchandise.

In certain regions the absence of small coins obliges people to cut up pieces of silver, jewelry, bracelets and necklaces, or else to melt down the silver from fragments and jewelry and cast them in the

436 It will perhaps be of some interest to note here that the peoples of Laos have no respect for European gold coins, [420] because their gold 822 is alloyed with copper! In this country, as in all of the Far East in 439 general, it is thought that gold is the noble metal par excellance, that 177 it is polluted and diminished by alloying it with copper, which is unworthy of it, and that it can endure being made into an alloy only with silver.

The only "gold" coins in use, and still not at all currently in northern Laos, are books of gold leaf the thickness of tinfoil. They come from China and bear the official stamps of the country's banks which put them into circulation as "merchandise" in the same way as bars of silver.

Weighing instruments

405 The weighing instruments used in Laos include the "Ta-Dieng" or "Sing," a Chinese steelyard made of wood which has three rows of graduations. It may have a hook or a single platform, and is used for weights ranging from one "Sang" (1.23849 kilograms) up to several piculs.

For weights of less than a "Sang" the same kind of Chinese steelyard, with a hook or platform, is used, but it is smaller and made of ivory or bone.

A small pair of beam scales with platforms shaped like cupels, which is called "Sing-Dieng," is used mainly for weighing precious metals and gems.

There are several series of weights for balances. They are made of bronze, iron or copper and are most diverse in shape, representing elephants, imaginary birds, hexagons, pentagons, cones, pyramids, etc.

2. TRADE COMMODITIES AND PRODUCTS OF EXCHANGE

438 Since there is no industry to speak of in Laos, the local products 241 which make up the basic commodities of interior trade and exports come mainly from agriculture, livestock raising, scavenging, fishing and hunting. Mention may be made, however, of certain products of local, not to say familial, industry which enter into interior commerce and to some extent into the trade which goes on with neighboring countries.

438 [421] These include cloth goods of pure silk, either plain or 433 spangled with gold, goods of silk blended with cotton, and wholly cotton goods, then articles of jewelry and goldsmithing, and finally metals and ores from the still rudimentary mining industry and pottery goods, edge-tools, basketry, etc.

degree.

289 Paper. The manufacture of paper using the bark of a tree called "Kok-Sa" (1) is limited to a single region of northern Laos.

(1) See Chapter VII.

It is not of any great importance, since it does not even suffice for local consumption.

The manufacturing processes are those familiar to everyone as being used in China, in Japan, in Annamite lands and in Burma.

321 531 Wood and ivory carving. Here we no longer have to deal with an industry, but with an art. The men who practice it are few in number, are highly paid, work slowly and are generally inveterate opium smokers.

Like the goldsmiths and jewelers, the wood and ivory carvers of Laos reproduce, ad infinitum, immutable models which their predecessors have handed down. They are, however, able to execute motifs from any given design. To be sure, they are inferior to their Burmese, Annamite, Malay, Chinese and especially Japanese colleagues as regards the movement, harmony, purity of form and finish of their work.

532 Fresco painting. The pagodas of Laos, which have been left untended for many long years, contain curious fresco paintings set off with gold, but lack of care and exposure to the weather have partly destroyed them. This art has very few practitioners in Laos, and it should be added that most of the existing frescoes are mainly the work of Burmese, Cambodians and Chinese of whom the native artists are only the pupils.

396 [438] Pirogue carpenters. Nearly all the inhabitants who [464] live on the banks of the big river or its principal tributaries are able to carve out a pirogue. Certain villages, however, have a monopoly in this industry.

When it is a matter merely of hewing out a pirogue which is to be used only for crossing the river, fishing or agricultural service, everyone does a fairly good job. But for the large pirogues which are reserved for regattas, voyages and commercial transports, recourse must be had to specialists. Only they know how to give their products

653 [480] Construction of this line was authorized by the law of
496 December 25, 1898, but its extension to the Mekong, and that is to
185 say the means of entrance into Laos, is classified among the lines of third-degree urgency for which routes have scarcely been outlined.

438 Another railway has also been planned from Binh-Dinh to
633 Attopeu, with the same third-degree urgency classification as the line from Savannakhet to Quang-Tri. It seems astonishing that anyone should have thought, even as a line of third-degree urgency, of a line which would start from the sea and end in a cul-de-sac, crossing one of the most mountainous regions which is inhabited by Kha tribes who are still partly unpacified. It may be that there is some thought of facilitating, by means of such a line, the exploitation of the gold and copper-bearing deposits in the region of Attopeu, even though it has now been established that the best deposits are located on the Se-Sane, more than 50 kilometers to the south of this point as the crow flies. It is also to be feared that by reason of the nature of the terrain this line may cost as much as 200,000 francs per kilometer, if the conditions of its route be compared with those of the lines estimated at 125,000 francs.

The projected Savannakhet-Quang-Tri railway does not seem to be the best solution for creating an entry into Laos and an outlet to the sea.

In the first place, it is not the shortest and most economical, despite the low elevation of the ridge of Ai-Lao, which is only 410 meters in altitude.

Besides, Savannakhet has never been a trade center and market of distribution and transit like Luang-Prabang, Pak-Lay, Nong-Khay and Bassac.

To be sure, it is an administrative center situated opposite the market of Ban-Mouk and the seat of the main office of the Cochinchina River Merchant Fleet Company [Compagnie des Messageries Fluviales], which has storehouses, a depot, workshops, etc. there. But this center was built up from nothing scarcely six years ago. The market of Ban-Mouk is an unimportant one, and the office of the River Merchant Fleet is inaccessible to its steam launches during a large part of the year.

[481] If Nong-Khay, instead of Ban-Mouk, were located opposite Savannakhet, there would be an advantage to capturing this great market in which the major part of the trade of Upper and Middle Laos is centered, and to turn this trade away from Bangkok to the profit of Tourane. But one must surrender to the evidence, for Nong-Khay

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is no further from Vinh than Savannakhet is from Tourane. In fact, the distance by steamship to Hin-Boun (or Tha-Kek) and from there to Ben-Thuy [Illustration here] (port of Vinh) by way of Nape, the ridge of Tram-Mua and Ha-Trai by railway is only 500 kilometers, whereas it is also 500 kilometers from Savannakhet to Tourane.

It has been objected that the ridge of Tram-Mua, the highest point on the line in question, is at an altitude of more than 1,200 meters, that many calcareous peaks encumber the route, and that the port of Ben-Thuy has a sand bar (that of Cua-Hoi) which leaves a depth of water of only 1.5 to 4.5 meters, depending on the tide.

All of this information is correct, although somewhat exaggerated. The ridge of Tram-Mua is not an insurmountable obstacle, and the road which crosses it leaves the Mekong at the 250 meter level and manages to reach it by rounding the [482] peaks of Pou-Hak and Pou-Kha-Sak and by rising gradually, ascending 1000 meters over a distance of about 140 to 150 kilometers.

Ha-Trai, moreover, which is situated on the river of Ngan-Pho, is at approximately the 100 meter level, and the descent from the ridge requires half a day on elephant back. The slope is very steep, without any doubt, on the Annamite side, since it represents the hypotenuse of a right triangle with a base 15 kilometers long and an altitude of 1,100 meters. It is not such, however, as to make the establishment of a railroad impossible, and cog-railways could also be used, as in Switzerland, at the steepest parts of the route.

Finally, the bar of Cua-Hoi is only an imaginary obstacle. Indeed, it would be sufficient merely to extend the railway beyond the bar, where the foundation is everywhere solid enough, or else to dredge a channel.

From the financial point of view the advantage also lies with the Hin-Boun-Ben-Thuy project, which will cost 30 millions instead of 61. Indeed, expenditures of 24 millions are anticipated for the Quang-Tri-Tourane section, to which 37 millions must be added for the Quang-Tri-Savannakhet section (about 300 kilometers at 125,000 francs per kilometer), whereas if we assume a cost of 150,000 francs (1) per kilometer for the Hin-Boun-Ben-Thuy line (about 200 kilometers),

(1) Cost anticipated for the Vietri-Lao-Kay and Saigon-Qui-Nhon lines.

we are confronted with an expenditure of 30 millions. The difference between 30 and 61 millions is so great that it would even be possible

505 Large quantities of nep (rice suitable
438 for making alcohol), hides, horn, cardamom, wax, benzoin, various gums, etc. were shipped from Bassac, from Pakse, from Savannakhet, from Vien-Tiane and from other Laotian centers which had formerly traded exclusively with Bangkok by way of the Nongkay-Outaradit route on the Menam and by the Korat route on the Se-Moun.

505 "Passenger traffic, which was almost nil when the new services
484 were established, is increasing every day. The natives are beginning to become familiar with this rapid, convenient and inexpensive manner of traveling which the steamship represents and they are making more frequent use thereof, a fact which can only contribute to the broadening of relations between the various posts scattered along the great river and increase trade in their products of all kinds" (1).

(1) See, in Appendix XXX, the transport rates between France and Indo-China and between Saigon and Laos.

[487] [Illustration at top of page]

CHAPTER XI

1. SOCIAL STATUS. SLAVERY

[565] Upon our arrival in Laos, we found a hierarchial society com-
567 prised of nobles, commoners and slaves. We could not do better than
178 to preserve all features of the political, social and administrative
177 organization just as it had been. In this respect we took our inspiration from our predecessors the Siamese, leaving our new subjects the utmost liberty and respecting their traditions, customs and mores insofar as these were compatible with our own institutions.

Thus we were at times forced to recall certain native officials who had compromised themselves with the Siamese, or who through their exactions had made themselves unworthy of their office. Moreover, we have always acted tactfully and mildly, [488] leaving the choice of officials to election, in accordance with custom.

But above all, we took radical measures by completely suppressing the slave trade and by regularizing a very mild form of slavery for debt.

[556] There used to be slavery in Laos, as in Siam, in the form of slavery by capture, by purchase and for debt. It yielded high profits for those who engaged in the traffic, for the children and grandchildren of slaves were slaves themselves at birth, a fact which increased the fortunes of their masters to that extent.

423 either on the surface or underneath.

"The inhabitants of the land are, in the last analysis, only usufructuaries who have the right of enjoyment of the land which they occupy and cultivate. The State may expropriate any occupant at any time by paying him a sum equal to the value of plantations or constructions made by him on the expropriated ground.

"The right of enjoyment of land is subject to certain conditions. The first of these is that the land occupied shall really be occupied and kept in a state of cultivation. Any property which has been abandoned or not cultivated for more than three years is defined as free ground and reverts to the State, which may cede it to any new usufructuary who is desirous of working it. Any inhabitant who clears free ground and places it under cultivation becomes the legitimate proprietor of the products and harvests which he obtains therefrom.

"What is true for individuals is equally true for the groups which certain races, living a patriarchal life, are accustomed to form. These groups which hold their work and their profits in common are regarded as a single civil person.

"Here there is, therefore, neither private domain, nor public domain nor reserve. There is only the domain of the State, which includes all."

(Le Laos français, op. cit.)

[Lieutenant-colonel Tournier, (Superior Resident in Laos), "Notice sur le Laos français," in Revue Indochinoise, Hanoi, 1900.]

651 In the absence of a tax on land, local exit duties have been levied [501] [Illustration] [502] [Blank page] [503] to take the place of such a tax. They bear only on products of the soil and forest and on livestock, and consist of the following:

Tax on elephants

438 A duty equivalent to one-half the sale price, except in the case of exemptions granted by a decision of the superior resident.

651 Tax on buffaloes, oxen, horses and pigs

Oxen, cattle	2.50 francs
Buffaloes and buffalo-cows	7.50 "
Pigs	2.00 "

149: Reinach--381 G-3 (no date) 1901 AM1 Indochina
Laotians AM8

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Tax on rice, paddy, horns, hides, etc.

	Per picul (francs)	Per hundred kilograms (francs)
Paddy	0.25	0.416
Rice	0.50	0.832
Gum lac	2.50	4.16
Chinese nettle	2.50	4.16
Buffalo horns and hides	2.50	4.16
Buck horns and hides	3.75	6.25
Anteater scales	3.75	6.25
Cardamom	5.00	8.32
Elephant and tiger bones	3.75	6.25
Benzoin	12.50	20.82
Rubber	12.50	20.82
Wax	12.50	20.82
Ivory	50.00	83.20
Pirogues	ten percent ad valorem.	

Also to be added are certain incidental receipts, such as those arising from chancery fees or those collected by the native tribunals in conformity with the rates scheduled by the code of Vien-Tiane.

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The royal treasury of Luang-Prabang subsidizes certain expenses, such as the upkeep of the kingdom's militia, of the native hospital in Luang-Prabang, of the Franco-Laotian school in Luang-Prabang, etc. [504]

Finally, the general budget of Indo-China pays out a variable sum annually for the purpose of balancing the receipts and expenditures of Laos.

C. Opium

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One of the most important sources of Laotian revenue is provided by the sale of opium. The administration is responsible for the sale of this substance, which it manufactures itself and which is marketed by licensed merchants acting as middlemen.

Before 1900, Laos sold on its own behalf the opium which was allotted to it by the Cochinchina Customs and Excise Office (1).

(1) This was true only for Lower Laos. The opium sold in Upper Laos came from the Luang-Prabang distillery, which is no longer in operation today.